

SEQUENCE LISTING

<110> Bayer Pharmaceuticals Corporation
Clairmont, Kevin
Lumb, Kevin
Buckholz, Thomas
Salhanick, Arthur

<120> PITUITARY ADENYLATE CYCLASE ACTIVATING PEPTIDE (PACAP) RECEPTOR
(VPAC2) AGONISTS AND THEIR PHARMACOLOGICAL METHODS OF USE

<130> 5189

<150> US 60/539,550
<151> 2004-01-27

<150> US 60/566,499
<151> 2004-04-29

<160> 155

<170> PatentIn version 3.3

<210> 1
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 1

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 2
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 2

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 3
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(29)
<223> ACETYLTATION

<400> 3

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys
20 25

<210> 4
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 4

His Thr Glu Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 5
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 5

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Gln Asp Ile Lys Gln Gly Gly Thr
20 25 30

<210> 6
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 6

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
20 25 30

<210> 7
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 7

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Leu Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 8
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 8

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 9
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 9

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala His Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
 20 25 30

<210> 10
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 10

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys His Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
 20 25 30

<210> 11
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 11

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
 20 25 30

<210> 12
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 12

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
 20 25 30

<210> 13

<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 13

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Arg Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
20 25 30

<210> 14
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 14

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
20 25 30

<210> 15
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 15

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Lys Arg
20 25 30

<210> 16
<211> 30
<212> PRT
<213> Homo sapiens

<220>

<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 16

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Gln Gln Lys Arg
20 25 30

<210> 17
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 17

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Arg Gln Lys Arg
20 25 30

<210> 18
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 18

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Arg
20 25 30

<210> 19
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 19

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ala
 20 25 30

<210> 20
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 20

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Phe
 20 25 30

<210> 21
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 21

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys His
 20 25 30

<210> 22
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 22

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ile
 20 25 30

<210> 23
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 23

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Lys
20 25 30

<210> 24
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 24

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Leu
20 25 30

<210> 25
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 25

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Met
20 25 30

<210> 26
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 26

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Pro
20 25 30

<210> 27
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 27

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Gln
20 25 30

<210> 28
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 28

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ser
20 25 30

<210> 29
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 29

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Thr
20 25 30

<210> 30

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 30

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Val
20 25 30

<210> 31

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 31

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Trp
20 25 30

<210> 32

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 32

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Tyr
 20 25 30

<210> 33
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 33

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile
 20 25 30

<210> 34
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 34

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile
 20 25 30

<210> 35
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 35

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile
 20 25 30

<210> 36

<211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 36

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Arg Ile
 20 25 30

<210> 37
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 37

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Arg Gln Arg Ile
 20 25 30

<210> 38
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 38

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
 20 25 30

<210> 39
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>

<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 39

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 40
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(29)
<223> ACETYLTATION

<400> 40

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys
20 25

<210> 41
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 41

His Thr Glu Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 42
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 42

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Gln Asp Ile Lys Gln Gly Gly Thr
 20 25 30

<210> 43
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 43

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
 20 25 30

<210> 44
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 44

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Leu Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr
 20 25 30

<210> 45
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 45

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr
 20 25 30

<210> 46
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 46

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala His Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 47
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 47

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys His Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 48
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 48

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
20 25 30

<210> 49
<211> 30
<212> PRT
<213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 49

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
 20 25 30

<210> 50
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 50

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Arg Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
 20 25 30

<210> 51
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 51

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg
 20 25 30

<210> 52
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 52

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Lys Arg
20 25 30

<210> 53

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 53

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Gln Gln Lys Arg
20 25 30

<210> 54

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 54

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Arg Gln Lys Arg
20 25 30

<210> 55

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 55

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Arg
20 25 30

<210> 56
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 56

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ala
20 25 30

<210> 57
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 57

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Phe
20 25 30

<210> 58
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 58

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys His
20 25 30

<210> 59

<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 59

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ile
20 25 30

<210> 60
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 60

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Lys
20 25 30

<210> 61
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 61

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Leu
20 25 30

<210> 62
<211> 30
<212> PRT
<213> Homo sapiens

<220>

<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 62

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Met
20 25 30

<210> 63
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 63

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Pro
20 25 30

<210> 64
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 64

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Gln
20 25 30

<210> 65
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLTATION

<400> 65

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ser
 20 25 30

<210> 66
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 66

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Thr
 20 25 30

<210> 67
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 67

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Val
 20 25 30

<210> 68
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 68

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Trp
 20 25 30

<210> 69
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 69

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Tyr
20 25 30

<210> 70
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 70

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile
20 25 30

<210> 71
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 71

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile
20 25 30

<210> 72
<211> 30
<212> PRT
<213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 72

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile
 20 25 30

<210> 73
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 73

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Arg Ile
 20 25 30

<210> 74
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 74

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Arg Gln Arg Ile
 20 25 30

<210> 75
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 75

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg Tyr
20 25 30

<210> 76

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLTATION

<400> 76

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg Tyr
20 25 30

<210> 77

<211> 29

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(29)

<223> ACETYLTATION

<400> 77

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys
20 25

<210> 78

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLTATION

<400> 78

His Thr Glu Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg Tyr
 20 25 30

<210> 79
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 79

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Gln Asp Ile Lys Asn Gly Gly Thr
 20 25 30

<210> 80
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 80

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
 20 25 30

<210> 81
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 81

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Leu Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Asn Lys Arg Tyr
 20 25 30

<210> 82

<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 82

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Asn Lys Arg Tyr
20 25 30

<210> 83
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 83

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala His Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg Tyr
20 25 30

<210> 84
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 84

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys His Tyr Leu Gln Ser Ile Lys Asn Lys Arg Tyr
20 25 30

<210> 85
<211> 30
<212> PRT
<213> Homo sapiens

<220>

<221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 85

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
 20 25 30

<210> 86
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 86

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
 20 25 30

<210> 87
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 87

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Arg Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
 20 25 30

<210> 88
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 88

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
 20 25 30

<210> 89
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> .89

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Asn Lys Arg
 20 25 30

<210> 90
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 90

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Gln Asn Lys Arg
 20 25 30

<210> 91
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 91

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Arg Asn Lys Arg
 20 25 30

<210> 92
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 92

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Arg
20 25 30

<210> 93
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 93

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Ala
20 25 30

<210> 94
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 94

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Phe
20 25 30

<210> 95
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 95

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys His
20 25 30

<210> 96
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 96

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Ile
20 25 30

<210> 97
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 97

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Lys
20 25 30

<210> 98
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(30)
<223> ACETYLATION

<400> 98

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Leu
20 25 30

<210> 99

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 99

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Met
20 25 30

<210> 100

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 100

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Pro
20 25 30

<210> 101

<211> 30

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (1)..(30)

<223> ACETYLTATION

<400> 101

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Gln
 20 25 30

<210> 102
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 102

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Ser
 20 25 30

<210> 103
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 103

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Thr
 20 25 30

<210> 104
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 104

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Val
 20 25 30

<210> 105

<211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 105

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Trp
 20 25 30

<210> 106
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 106

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Tyr
 20 25 30

<210> 107
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 107

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Ile
 20 25 30

<210> 108
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>

<221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 108

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Ile
 20 25 30

<210> 109
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 109

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Ile
 20 25 30

<210> 110
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 110

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Asn Arg Ile
 20 25 30

<210> 111
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLTATION

<400> 111

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Arg Asn Arg Ile
 20 25 30

<210> 112
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(32)
 <223> Cysteine at position 32 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(32)
 <223> ACETYLATION

<400> 112

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
 20 25 30

<210> 113
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(32)
 <223> Cysteine at position 32 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(32)
 <223> ACETYLATION

<400> 113

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
 20 25 30

<210> 114
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(30)

<223> Cysteine at position 30 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(30)
 <223> ACETYLATION

<400> 114

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Cys
 20 25 30

<210> 115
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(32)
 <223> Cysteine at position 32 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(32)
 <223> ACETYLATION

<400> 115

His Thr Glu Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
 20 25 30

<210> 116
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(32)
 <223> Cysteine at position 32 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(32)
 <223> ACETYLATION

<400> 116

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Gln Asp Ile Lys Gln Gly Gly Thr Cys
 20 25 30

<210> 117
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> Cysteine at position 31 is PEGylated.

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLATION

<400> 117

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys
20 25 30

<210> 118
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> Cysteine at position 32 is PEGylated.

<220>
<221> MOD_RES
<222> (1)..(32)
<223> ACETYLATION

<400> 118

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Leu Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr Cys
20 25 30

<210> 119
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> Cysteine at position 32 is PEGylated.

<220>
<221> MOD_RES
<222> (1)..(32)
<223> ACETYLATION

<400> 119

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr Cys
 20 25 30

<210> 120
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(32)
 <223> Cysteine at position 32 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(32)
 <223> ACETYLATION

<400> 120

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala His Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
 20 25 30

<210> 121
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(32)
 <223> Cysteine at position 32 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(32)
 <223> ACETYLATION

<400> 121

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys His Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
 20 25 30

<210> 122
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE

<222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 122

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys
 20 25 30

<210> 123
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 123

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys
 20 25 30

<210> 124
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 124

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Arg Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys
 20 25 30

<210> 125
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 125

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys
 20 25 30

<210> 126
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 126

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Lys Arg Cys
 20 25 30

<210> 127
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 127

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Gln Gln Lys Arg Cys
20 25 30

<210> 128

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(31)

<223> Cysteine at position 31 is PEGylated.

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLATION

<400> 128

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Arg Gln Lys Arg Cys
20 25 30

<210> 129

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(31)

<223> Cysteine at position 31 is PEGylated.

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLATION

<400> 129

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Arg Cys
20 25 30

<210> 130

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 130

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ala Cys
 20 25 30

<210> 131
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 131

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Phe Cys
 20 25 30

<210> 132
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 132

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys His Cys
 20 25 30

<210> 133
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 133

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ile Cys
 20 25 30

<210> 134
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 134

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Lys Cys
 20 25 30

<210> 135
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLTATION

<400> 135

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Leu Cys
20 25 30

<210> 136

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(31)

<223> Cysteine at position 31 is PEGylated.

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLATION

<400> 136

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Met Cys
20 25 30

<210> 137

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(31)

<223> Cysteine at position 31 is PEGylated.

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLATION

<400> 137

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Pro Cys
20 25 30

<210> 138

<211> 31

<212> PRT

<213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 138

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Gln Cys
 20 25 30

<210> 139
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 139

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ser Cys
 20 25 30

<210> 140
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 140

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Thr Cys
 Page 45

20

25

30

<210> 141
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 141

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Val Cys
 20 25 30

<210> 142
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 142

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Trp Cys
 20 25 30

<210> 143
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)

<223> ACETYLATION

<400> 143

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Tyr Cys
20 25 30

<210> 144

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(31)

<223> Cysteine at position 31 is PEGylated.

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLATION

<400> 144

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile Cys
20 25 30

<210> 145

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(31)

<223> Cysteine at position 31 is PEGylated.

<220>

<221> MOD_RES

<222> (1)..(31)

<223> ACETYLATION

<400> 145

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile Cys
20 25 30

<210> 146

<211> 31

<212> PRT

<213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 146

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile Cys
 20 25 30

<210> 147
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 147

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Arg Ile Cys
 20 25 30

<210> 148
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (1)..(31)
 <223> Cysteine at position 31 is PEGylated.

<220>
 <221> MOD_RES
 <222> (1)..(31)
 <223> ACETYLATION

<400> 148

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Arg Gln Arg Ile Cys
 20 25 30

<210> 149
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 149

His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Ala Ala Val Leu Gly Lys Arg Tyr Lys
 20 25 30

Gln Arg Val Lys Asn Lys
 35

<210> 150
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 150

His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Ala Ala Val Leu
 20 25

<210> 151
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 151

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 152
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 152

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
 20 25 30

<210> 153

<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(31)
<223> ACETYLTATION

<400> 153

His Thr Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr
20 25 30

<210> 154
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> Cysteine at position 32 is PEGylated.

<400> 154

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
20 25 30

<210> 155
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (1)..(32)
<223> ACETYLTATION

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> Cysteine at position 32 is PEGylated.

<400> 155

His Thr Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys
20 25 30